

WHAT IS CLAIMED IS:

1. A method of recovering PCM modem data in a data network, comprising the steps of:

5 monitoring data transmission in an upstream data path of a data communication;

retrieving downstream data path transmission information from said data transmission in said upstream data path;

10 reconstructing PCM data in said downstream data path based on said retrieved downstream data path transmission information in said upstream data path; and

transmitting said reconstructed PCM data.

15 2. The method of claim 1 wherein said data transmission in said upstream data path direction is received from a client modem.

3. The method of claim 1 wherein said monitoring step includes the step of detecting a handshake protocol in said data communication.

20 4. The method of claim 3 further including the step of initializing a state machine to a call start state.

5. The method of claim 4 wherein said initializing step includes the step of detecting a V.90 modem call communication.

25 6. The method of claim 5 wherein said monitoring step includes the step of detecting a S/Sbar signal in said upstream data path.

7. The method of claim 1 wherein said retrieving step includes the step of decoding said downstream data path transmission information.

8. The method of claim 1 further including the step of echo cancelling said data transmission in said upstream data path.

5 9. The method of claim 1 wherein said step of reconstructing includes the step of performing data rate conversion.

10 10. The method of claim 9 wherein said step of performing said data rate conversion includes converting a data rate from 8 Ksymbols/second to 3.2Ksymbols/second.

11. The method of claim 1 wherein said reconstructing step includes the step of retrieving one or more of quantization level parameters.

15 12. The method of claim 11 wherein said retrieving step includes the step of comparing said one or more quantization level parameters to a corresponding one or more data samples.

20 13. The method of claim 12 wherein each of said data samples include an 8K data sample.

14. A method of recovering PCM modem data in a data network, comprising the steps of:

25 monitoring data transmission in an upstream data path of a V.90 modem call communication;

detecting a handshake protocol in said data transmission;

retrieving downstream data path transmission information from said data transmission in said upstream data path;

reconstructing PCM data in said downstream data path based on said retrieved downstream data path transmission information in said upstream data path; and

transmitting said reconstructed PCM data.

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15. The method of claim 14 wherein said data transmission in said upstream data path direction is received from a client modem.

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16. The method of claim 14 further including the step of initializing a state machine to a call start state.

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17. The method of claim 14 wherein said monitoring step includes the step of detecting a S/Sbar signal in said upstream data path.

18. The method of claim 14 wherein said retrieving step includes the step of decoding said downstream data path transmission information.

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19. The method of claim 14 further including the step of echo cancelling said data transmission in said upstream data path.

20. The method of claim 14 wherein said step of reconstructing includes the step of performing data rate conversion.

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21. The method of claim 20 wherein said step of performing said data rate conversion includes converting a data rate from 8 Ksymbols/second to 3.2Ksymbols/second.

22. The method of claim 14 wherein said reconstructing step includes the step of retrieving one or more of quantization level parameters.

23. The method of claim 22 wherein said retrieving step includes the step of comparing said one or more quantization level parameters to a corresponding one or more data samples.

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24. The method of claim 23 wherein each of said data samples include an 8K data sample.

25. A system for recovering PCM modem data in a data network, comprising:  
means for monitoring data transmission in an upstream data path of a data communication;

means for retrieving downstream data path transmission information from said data transmission in said upstream data path;

means for reconstructing PCM data in said downstream data path based on said retrieved downstream data path transmission information in said upstream data path; and

means for transmitting said reconstructed PCM data.

26. The system of claim 25 wherein said data transmission in said upstream data path direction is received from a client modem.

27. The system of claim 25 wherein said monitoring means includes means for a handshake protocol in said data communication.

28. The system of claim 27 further including means for initializing a state machine to a call start state.

29. The system of claim 28 wherein said initializing means includes means for detecting a V.90 modem call communication.

30. The system of claim 29 wherein said monitoring means includes means for detecting a S/Sbar signal in said upstream data path.

5 31. The system of claim 25 wherein said retrieving means includes means for decoding said downstream data path transmission information.

32. The system of claim 25 further including means for echo cancelling said data transmission in said upstream data path.

10 33. The system of claim 25 wherein said reconstructing means includes means for performing data rate conversion.

15 34. The system of claim 33 wherein said means for performing said data rate conversion includes means for converting a data rate from 8 Ksymbols/second to 3.2Ksymbols/second.

35. The system of claim 25 wherein said reconstructing means includes means for retrieving one or more of quantization level parameters.

20 36. The system of claim 35 wherein said retrieving means includes means for comparing said one or more quantization level parameters to a corresponding one or more data samples.

25 37. The system of claim 36 wherein each of said data samples include an 8K data sample.

38. A system for recovering PCM modem data in a data network, comprising:

means for monitoring data transmission in an upstream data path of a V.90 modem call communication;

means for detecting a handshake protocol in said data transmission;

means for retrieving downstream data path transmission information from said data transmission in said upstream data path;

means for reconstructing PCM data in said downstream data path based on said retrieved downstream data path transmission information in said upstream data path; and

means for transmitting said reconstructed PCM data.

39. The system of claim 38 wherein said data transmission in said upstream data path direction is received from a client modem.

40. The system of claim 38 further including means for initializing a state machine to a call start state.

41. The system of claim 38 wherein said monitoring means includes means for detecting a S/Sbar signal in said upstream data path.

42. The system of claim 38 wherein said retrieving means includes means for decoding said downstream data path transmission information.

43. The system of claim 38 further including means for echo cancelling said data transmission in said upstream data path.

44. The system of claim 38 wherein said reconstructing means includes means for performing data rate conversion.

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48. The system of claim 47 wherein each of said data samples include an 8K data sample.